EXAM PAPERS PRACTICE

# GCSE OCR Math J560

# Recurring Decimals

## Question Paper

*"We will help you to achieve A Star "*

**Question 1**

Write the recurring decimal $0.1\dot{5}$ as a fraction.
[$0.1\dot{5}$ means 0.1555...]

**[2 marks]**

**Question 2**

Write the recurring decimal $0.\dot{4}$ as a fraction.
[$0.\dot{4}$ means 0.444…]

**[2 marks]**

**Question 3**

Write the recurring decimal $0.\dot{3}6$ as a fraction.
Give your answer in its simplest form.
[$0.\dot{3}6$ means $0.3666\ldots$]

**[3 marks]**

**Question 4**

Write the recurring decimal $0.2\dot{5}$ as a fraction.
[$0.2\dot{5}$ means $0.2555...$]

**[2 marks]**

**Question 5**

Write the recurring decimal $0.\dot{2}$ as a fraction.
[$0.\dot{2}$ means $0.222\ldots$]

**[2 marks]**

**Question 6**

Use algebra to show that the recurring decimal $0.3\dot{8} = \frac{7}{18}$

**[2 marks]**

**Question 7**

Show that the recurring decimal $0.1\dot{7} = \frac{8}{45}$

**[2 marks]**

**Question 8**

Prove algebraically that the recurring decimal $0.2\dot{5}$ has the value $\frac{23}{90}$

**[2 marks]**

**Question 9**

Prove that the recurring decimal $0.\dot{3}\dot{6} = \frac{4}{11}$

**[3 marks]**

**Question 10**

Write these numbers in order of size.
Start with the smallest number.

$0.24\dot{6}\dot{6}$ $\quad$ $0.24\dot{6}$ $\quad$ $0.\dot{2}4\dot{6}$ $\quad$ $0.246$

**[2 marks]**

**Question 11**

Write the recurring decimal $0.\dot{6}\dot{3}$ as a fraction in its lowest terms.
You must show all your working.

**[3 marks]**

**Question 12**

Use algebra to show that the recurring decimal $0.\dot{4}1\dot{7} = \frac{139}{333}$

**[2 marks]**

**Question 13**

Write the recurring decimal $0.\dot{1}\dot{8}$ as a fraction in its lowest terms.
[$0.\dot{1}\dot{8}$ means 0.181818…]

**[2 marks]**

**Question 14**

Write the recurring decimal $0.4\ddot{8}$ as a fraction.
Show all your working.

**[2 marks]**

**Question 15**

Show that the recurring decimal $0.\dot{3}9\dot{6} = \frac{44}{111}$

**[2 marks]**